

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for the production of a plurality of optoelectronic semiconductor chips each having a plurality of structural elements with each structural element comprising at least one semiconductor layer, comprising the steps of:

providing a chip composite base having a substrate and a growth surface;

forming ~~a mask material layer~~ on the growth surface~~[,]~~ a mask material layer with a multiplicity of windows, most of which have an average extent of less than or equal to 1 μm , wherein a mask material is chosen in such a way that a semiconductor material of the semiconductor layer that is to be grown in a later method step essentially cannot grow on said mask material or can grow in a substantially worse manner in comparison with the growth surface;

essentially simultaneously growing semiconductor layers to form the structural elements on regions of the growth surface that lie within the windows; and

singulating the chip composite base with applied material to form semiconductor chips each having a plurality of structural elements.

2. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the chip composite base has at least one semiconductor layer grown epitaxially onto the substrate and the growth surface is a surface on that side of the epitaxially grown semiconductor layer which is remote from the substrate.

3. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the chip composite base has a semiconductor layer sequence grown epitaxially onto the substrate with an active zone that emits electromagnetic radiation, and the growth surface is a surface on that side of the semiconductor layer sequence which is remote from the substrate.

4. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the structural elements respectively have an epitaxially grown semiconductor layer sequence with an active zone that emits electromagnetic radiation.

5. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the mask material has SiO_2 , Si_xN_y or Al_2O_3 .

6. (Currently Amended) The method as claimed in claim [[1]] 3, ~~in which~~ wherein, after the growth of the semiconductor layers, a layer made of electrically conductive contact material that is transmissive to an electromagnetic radiation emitted by the active zone is applied to the semiconductor layers, so that semiconductor layers of a plurality of structural elements are electrically conductively connected to one another by the contact material.

7. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the average thickness of the mask material layer is less than the cumulated thickness of the semiconductor layers of a structural element.

8. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the mask material layer is at least partly removed after the growth of the semiconductor layers.

9. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein, after the growth of the semiconductor layers layer sequences, a planarization layer is applied over the growth surface.

10. (Currently Amended) The method as claimed in claim 9, ~~in which~~ wherein a material whose refractive index is lower than that of the semiconductor layers is chosen for the planarization layer.

11. (Currently Amended) The method as claimed in claim 9, ~~in which~~ wherein a dielectric material ~~which has dielectric properties~~ is chosen for the planarization layer.

12. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the growth conditions for the growth of the semiconductor layers are at least one of set and/or and varied during growth in such a way that semiconductor layers of the structural elements form a lenslike, a truncated conelike lens-shaped form, a truncated cone-shaped form, or a polyhedral form.

13. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the semiconductor layers are grown by means of metal organic vapor phase epitaxy.

14. (Currently Amended) An optoelectronic semiconductor chip, ~~characterized in~~ that it is produced according to a method as claimed in claim 1.

15. (New) The method as claimed in claim 4, wherein, after the growth of the semiconductor layers, a layer made of electrically conductive contact material that is transmissive to an electromagnetic radiation emitted by the active zone is applied to the semiconductor layers, so that semiconductor layers of a plurality of structural elements are electrically conductively connected to one another by the contact material.